## **Removing Rust from Ferrous Metal Parts.**

Almost always, the ferrous metal parts of a torch oxidize over time. Iron drip cups, control arms, small steel screws, and feed tubes are some of the more typical components that require attention. Not only do these parts rust, but they usually have a buildup of sludge and grime.

I always recommend that a torch be disassembled as much as possible. It is understandable that you will not be able to remove or disassemble some of the components on these old torches. It does, however, make it significantly easier to clean the individual parts if the iron and steel parts can be seperated from the brass and bronze components.



Whether you decide to use Gun Blue or paint on the individual parts, they must be rust free and clean prior to applying the final finish. To do this, I use a product called "Krud Kutter The Must For Rust" (above)

This product will remove all the rust and grime from the parts. I do not use it as a spray. Instead, I pour it into a plastic container and soak the parts. It may take several days to eliminate all the rust. Each day I inspect the parts. If there is a heavy buildup of rust I will wire brush the part each day to remove the encrustation. Depending on the level of oxidation, I will either wire brush it by hand or use a wire wheel on an electric motor. The process is complete when even the bottom of the pitted areas is clean and gray in color. There should be no dark spots on the part. After the part is clean, it can be painted. The Krud Kutter acts as a primer for the paint. If you intend to use Gun Blue, you will need to wire brush the part before bluing it. The product leaves a protective coating on the part that will inhibit the Gun Blue from working properly.

The product is readily available. I get mine at Home Depot



In the pictures above, the picture on the left shows a very rusty Bernz drip cup I found in my boneyard. It had certainly spent a lot of time outside before I acquired it. The picture on the right is that same drip cup after having been soaked in "Krud Kutter" for approximately twelve hours and then being wire brushed. It still has a lot of rust, scale, and carbon on it.

The photo below left is the same drip cup after soaking for 24 hours and then being lightly wire brushed.





The drip cup is now ready for painting. The "Krud Kutter" actually prepares the metal for painting and acts as a primer. When I paint a drip cup, I attach it to wooden paint stirrer that I have tapered down at one end. This allows me to secure the drip cup to the stick and approach it from any position (see photo above right). After it's painted and the paint is wet, I can place the stick on the edge of a table or shelf with the cup end reaching well past the edge of the table. I can then place a weight on the other end of the stick to keep it from falling. This allows it to dry quickly. I don't use spray cans for this application. There are just too many recesses and angled surfaces. Unless you are very careful, there would probably be runs in the paint. If you choose to use spray paint, do it in multiple light coats to prevent runs. I choose to use small cans of paint and a paint brush. I prefer flat black instead of glossy. I use small utility or chip brushes. I dab the paint on rather than using brush strokes. It tends to come out more evenly this way and it also fills in some of the pitted areas. Doing it in this manner only requires one coat.



The picture to the left demonstrates the finished drip cup. Obviously, this process would have been much easier if I had a sand blaster. This process works fine for me and I don't have the space to store a sand blaster.